

**STATE OF ILLINOIS**  
**ILLINOIS COMMERCE COMMISSION**

<b>Illinois Commerce Commission</b>	:	
<b>On Its Own Motion</b>	:	
	:	<b>06-0525</b>
<b>Consideration of the federal standard on</b>	:	
<b>interconnection in Section 1254 of the</b>	:	
<b>Energy Policy Act of 2005.</b>	:	

**INTERIM ORDER**

By the Commission:

**The Federal Statutory Requirements**

On July 26, 2006, this Commission issued an Order commencing the instant docket. In that Order, it noted that the Energy Policy Act of 2005 (the "EPAct") requires every state commission to commence consideration of 16 U.S.C. Sec. 2621(d)(15), or, set a hearing date for consideration of this statute by August 8, 2006, and complete its consideration and make a determination concerning whether to implement the federal standard by August 8, 2007. (See, 16 U.S.C. Sec. 2621(a); 16 U.S.C. Sec. 2622(b)(5)(B)). The statute to be considered provides, in pertinent part:

(15) Interconnection. – Each electric utility shall make available, upon request, interconnection service to any electric consumer that the electric utility serves. For purposes of this paragraph, the term 'interconnection service' means service to an electric consumer under which an on-site generating facility on the consumer's premises shall be connected to the local distribution facilities. Interconnection services shall be offered based upon the standards developed by the Institute of Electrical and Electronics Engineers: IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, as they may be amended from time to time. In addition, agreements and procedures shall be established whereby the services are offered shall promote current best practices of interconnection for distributed generation, including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies. All such agreements and procedures shall be just and reasonable, and not unduly discriminatory or preferential.

(16 U.S.C. Sec. 2621(d)(15)).

The standard in question would require an electric utility to make interconnection services available upon request to any electric consumer that the utility serves based upon Institute of Electrical and Electronics Engineers (“IEEE”) Standard 1547. (16 U.S.C. 2621(d)(15)). “Interconnection service” is defined in the new federal Interconnection standard as service to an electric consumer, under which, an on-site generating facility on the consumer’s premises is connected to local distribution facilities. (*Id.*). To facilitate such interconnection, it would require utilities to establish agreements and procedures whereby the services offered shall promote current best practices of interconnection for distributed generation, which are to be deemed just and reasonable and not unduly discriminatory or preferential by state Commissions. (*Id.*).

IEEE Standard 1547 establishes the technical specifications for, and testing of, interconnection. It sets forth requirements regarding the performance, operation, testing, safety and maintenance necessary for interconnection. These criteria and requirements are applicable to all technologies with the aggregate capacity of 10 MVA or less at the point of common coupling.<sup>1</sup> (See, IEEE Standard 1547 at p. 2, Section 1.3 Limitations.)

Thus, the EAct requires this Commission to consider application of IEEE Standard 1547 by August 8, 2007. It also requires this Commission to consider the many other aspects involved in interconnection, including, but not limited to, such items as other pertinent technical standards, technical screening standards and standards regarding legal issues, such as insurance, cost allocation and dispute resolution. (16 U.S.C. Sec. 2621(d)(15).) Although the EAct requires the Commission to “make a determination concerning whether or not it is appropriate to implement” Sec. 2621(d)(15) by August 8, 2007, it does not require the implementation itself to be complete by that date.

Pursuant to the directive in the Order initiating this docket, the following parties have filed comprehensive verified comments regarding the many issues that must be resolved: Commonwealth Edison Co.; MidAmerican Energy Co.; the Ameren Illinois Utilities; the Environmental Law and Policy Center; and, Commission Staff. All parties agreed that IEEE Standard 1547 generally provides a sound set of technical standards regarding interconnection of generators that are not larger than 10 MVA. (The parties unanimously noted, however, that IEEE Standard 1547 does not apply, on its face, to generators that are larger than 10 MVA.)

ComEd, however, noted that, at least with respect to one technical item, the IEEE 1547 standard might be interpreted to conflict with the operation of ComEd’s distribution system -- *i.e.*, wherever the standard allows for a trip time of two (2) seconds for frequency or voltage abnormality. ComEd explained that the standard first circuit breaker open time in its network is two (2) seconds at 12kV (*i.e.*, fault occurs – breaker opens and stays open for two (2) seconds and then closes back again). Since the interconnected generator cannot be connected to the electric distribution system when

---

<sup>1</sup> An MVA is a megavolt ampere, which is equal to a megawatt. Commonwealth Edison Company asserts that a megawatt is about enough electricity for 225 average households. (ComEd Initial Comments at 2).

the circuit breaker closes, the interconnection trip time must be less than the two (2) seconds it will take for the ComEd breaker to reclose. (ComEd Comments at 9.)

The parties have engaged in several workshops. Currently, the parties remain in the process of engaging in workshops for the purpose of developing standards regarding, among other things, technical screening, standardized fees, and legal issues, such as, dispute resolution and insurance, and the method of implementation of the standards. Thus, while the EAct requires this Commission to consider the totality of circumstances involved in interconnection, only one issue, whether IEEE Standard 1547 should be utilized, has been resolved.

### **Analysis and Conclusions**

It is clear that IEEE Standard 1547 has been considered after all of the parties received notice and an opportunity to be heard on the subject. It is therefore this Commission's intention that utilities providing interconnection services utilize IEEE Standard 1547 for generating facilities that are not larger than 10 MVA.

We note, however, that, as the parties stated in their Comments, setting the standards that need to be developed for interconnection involves much more than determining whether IEEE Standard 1547 should be utilized, as there are many more issues involved than adoption of one set of technical standards that is not applicable to all sizes of generating facilities. Issues remain in this docket as to the appropriate engineering standard for generators of other sizes, the method of regulating interconnection (e.g., tariffing, formal rule, guidelines or posting of the interconnection procedures on the utility's website), standardization of legal matters, such as, but not limited to, standardized fees for the cost of interconnection application and engineering review, insurance requirements, dispute resolution alternatives and other issues. To date, however, these issues remain unresolved.

While the parties agree that IEEE Standard 1547 generally provides a sound engineering basis for interconnection of small generators to utilities, there is at least one set of circumstances in which the standard may conflict with a utility's distribution system. Moreover, no provisions have been developed or formulated as to how this Standard should be implemented. Also, provisions have not yet been formulated regarding other types of generators and the many other aspects of interconnection. In fact, the parties are currently discussing in workshops whether IEEE Standard 1547 is best implemented through tariffs, guidelines or through posting of the interconnection procedures on the utility's website or, through a Commission rule. We conclude, therefore, that it is impracticable, at this time, to develop the associated practices related to the application of IEEE Standard 1547 until the parties have developed and resolved positions regarding the many other aspects of, and issues involved in, interconnection.

We also note that, consistent with the EAct requisites, numerous workshops have been held and are scheduled for the purpose of developing guidelines or practices regarding such topics as technical screening, standardized fees, legal issues such as

dispute resolution and insurance requirements, and the method of implementation of the federal standard. However, given the complexity and breadth of the issues in this docket, it is unlikely that formal guidelines or practices implementing the federal standard can be developed by August 8, 2007.

### **Findings and Ordering Paragraphs**

The Commission, having considered the entire record herein and being fully advised in the premises, is of the opinion and finds that:

- (1) Commonwealth Edison Co. MidAmerican Energy Co., and the Ameren Illinois Utilities are “public utilities” within the meaning of the Public Utilities Act;
- (2) the Commission has subject-matter jurisdiction and jurisdiction over the parties;
- (3) the recitals of fact and conclusions of law reached in the prefatory portion of this Order are supported by the record and are hereby adopted as findings of fact and conclusions of law for purposes of this Order;
- (4) the Commission has considered the new federal standard for interconnection (16 U.S.C. Sec. 2621(d)(15)) and determined that it is in the public interest to implement the new federal interconnection standard based on practices best suited for Illinois; and
- (5) Institute of Electrical and Electronics Engineers (“IEEE”) Standard 1547 is hereby adopted as a technical standard for interconnection of generating facilities that are not larger than 10 MVA to electric distribution systems, provided that, notwithstanding that fact, if there are situations in which the IEEE Standard 1547 would allow for a trip time of two (2) seconds for frequency or voltage abnormality, an electric utility may require a specific trip time of less than two (2) seconds or else require the interconnecting party to accept responsibility for any damages that might result from its equipment having a longer trip time.

IT IS THEREFORE ORDERED that any standards arising from this docket shall incorporate Institute of Electrical and Electronics Engineers (“IEEE”) Standard 1547 for generators that are not larger than 10 MVA, subject to the condition noted above.

IT IS FURTHER ORDERED that, subject to the provisions of Section 10-113 of the Public Utilities Act and 83 Ill. Adm. Code 200.880, this Order is not final; and is not subject to the Administrative Review Law.

By Order of the Commission this 25<sup>th</sup> day of July, 2007.

(SIGNED) CHARLES E. BOX

Chairman